

(19) World Intellectual Property Organization  
International Bureau



07 DEC 2004



(43) International Publication Date  
18 December 2003 (18.12.2003)

PCT

(10) International Publication Number  
**WO 03/104382 A1**

(51) International Patent Classification<sup>7</sup>: C12H 1/15, C12N 9/12, 9/52, A23L 2/84

(21) International Application Number: PCT/NL03/00352

(22) International Filing Date: 14 May 2003 (14.05.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
02100681.2 7 June 2002 (07.06.2002) EP

(71) Applicant (for all designated States except US): DSM IP ASSETS B.V. [NL/NL]; Het Overloon 1, NL-6411 TB Heerlen (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): EDENS, Luppó [NL/NL]; Hoflaan 118, NL-3062 JL Rotterdam (NL). LOPEZ, Michel [FR/FR]; 74bis, Rue de la Quieze, F-59242 Templeuve (FR).

(74) Agent: HABETS, Winand, Johannes, Antonius; DSM Patents & Trademarks, P.O. Box 9, NL-6160 MA Geleen (NL).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMPROVED METHOD FOR THE PREVENTION OR REDUCTION OF HAZE IN BEVERAGES

(57) Abstract: The invention relates to a method for the prevention or reduction of haze in a beverage by the addition of a prolyl-specific and/or alamine specific endoprotease and the new beverages obtainable by the method according to the invention. It also relates to new endoproteases. It also relates to methods as described above wherein auxiliary enzymes are used in combination with the specific endoprotease. Sequence information of a genomic DNA, cDNA as well as protein sequences are provided.

WO 03/104382 A1